

Remarks/Arguments

Entry of the present amendment is respectfully requested. Reconsideration of the above-identified application in view of the present amendment is respectfully requested. Claims 1-4, 8-11, and 18-28 are pending in the present application. Claims 1, 2, 8-9, 20, and 22- 23 have been amended. Applicant respectfully acknowledges that claims 24-28 are allowable, and that claims 18-19 are allowed.

Rejections under 35 U.S.C. §102

Claims 1-4, 8-11, 20, 22, and 23 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 1,607,662 to Boynton (hereafter “Boynton”). It is respectfully submitted that, as amended, claim 1 patentably defines over Boynton and is therefore allowable.

As amended, claim 1 recites, *inter alia*, an articulatable head section having at least one planar stop surface and a cutting edge projecting from, and integrally formed with, the at least one planar stop surface. Boynton does not teach or suggest an articulatable head section having at least one planar stop surface. Even if Boynton teaches a planar stop surface, as the Examiner asserts, it is not part of the head section. The planar stop the Examiner refers to on page 4 of the Office Action is part of the end section 3 comprising part of the casing 2 – it is not part of the blade 22. The fact that the blade 22 rotates relative to the alleged planar stop surface reaffirms this (see Figs. 1-2).

Furthermore, Boynton does not teach or suggest a cutting edge integrally formed with the at least one planar stop surface. Boynton appears to teach that the rotary reamer blade 22 is pivotally mounted to the casing 2 comprising threaded

sections 3 (Fig. 1). As noted, the alleged planar stop is part of the casing 2.

Therefore, since the blade 22 is pivotally mounted to the casing 2, and the alleged planar stop is formed as part of the casing, the cutting edge of the blade 22 cannot possibly be integrally formed with the alleged planar stop. Since Boynton does not teach the subject matter of amended claim 1, it is respectfully submitted that as amended, claim 1 patentably defines over Boynton and is therefore allowable.

As amended, claim 2 recites a shaft member connected to the head section and extending coaxially within the tubular portion, wherein the shaft member and the head section are longitudinally movable relative to the tubular portion. Boynton does not teach or suggest that the head section is longitudinally movable relative to the tubular portion.

Boynton appears to teach a piston rod 16 that is moved by fluid pressure coaxially within casing 2, causing the blade 22 to rotate about the pivot bolt 24 (lines 62-70 and Figs. 1-2). In order for the blade 22 to rotate about the pivot bolt 24, the pivot bolt 24 must be secured to the casing 2. This allows the blade 22 to rotate relative to the end of the casing 2 (see Figs. 1-2). Since the pivot bolt 24 is secured to the casing 2, and the blade 22 is secured to the pivot bolt 24, the blade 22 cannot move longitudinally relative to the casing 2 because the pivot bolt 24 cannot move longitudinally relative to the casing 2. Since Boynton does not teach the subject matter of amended claim 2, it is respectfully submitted that as amended, claim 2 patentably defines over Boynton and is therefore allowable.

Claim 3 recites that the shaft member includes a terminal portion that projects beyond the proximal end portion of the elongate member. Boynton does not teach such structure. Boynton appears to teach a piston rod 16 disposed within the

casing 2 (Fig. 1). When the blade 22 is in a vertical position, the end of the piston rod 16 disposed in collar 25 does not extend beyond the end of the casing 2 (Fig. 1). Likewise, when the blade 22 is in a horizontal position, the end of the piston rod 16 coupled to piston 14 does not extend beyond the shoulder 3a of the casing 2 (Fig. 2). Since Boynton does not teach the subject matter of claim 3, it is respectfully submitted that claim 3 patentably defines over Boynton and is therefore allowable.

Claim 4 recites, *inter alia*, a cap member having a first surface that is engageable with a proximal end portion of the elongated member and an oppositely disposed second surface adapted to receive repetitive impacts. Boynton does not teach a second surface adapted to receive repetitive impacts. Boynton appears to teach a sub 1 threaded into the end of the casing 2 for connecting the rotary reamer assembly to the lower end of a drill stem (lines 65-68 and Fig. 1). The end of the sub 1 is open, thin-walled, and includes threads. An end having such a configuration cannot be adapted to receive repetitive impacts, as the threads and/or thin walls would likely be deformed – undesirable if the sub 1 is to be connected to a drill stem (presumably via the threads on the sub 1). Since Boynton does not teach the subject matter of claim 4, it is respectfully submitted that claim 4 patentably defines over Boynton and is therefore allowable.

As amended, claim 8 recites, *inter alia*, an articulatable head section having a cutting edge for cutting cortical bone and at least one planar stop surface integrally formed with said cutting edge. Boynton does not teach or suggest an articulatable head section having at least one planar stop surface. If the articulatable head has a cutting edge, and the at least one planar stop surface is integrally formed with the cutting edge, then the head has at least one planar stop surface.

Even if Boynton teaches a planar stop surface, as the Examiner asserts, it is not part of the head section. The planar stop the Examiner refers to on page 4 of the Office Action is part of the end section 3 comprising part of the casing 2 – it is not part of the blade 22. The fact that the blade 22 rotates relative to the alleged planar stop surface reaffirms this (*see* Figs. 1-2).

Furthermore, Boynton does not teach or suggest a cutting edge integrally formed with the at least one planar stop surface. Boynton appears to teach that the rotary reamer blade 22 is pivotally mounted to the casing 2 comprising threaded sections 3 (Fig. 1). As noted, the alleged planar stop is part of the casing 2. Therefore, since the blade 22 is pivotally mounted to the casing 2, and the alleged planar stop is formed as part of the casing, the cutting edge of the blade 22 cannot possibly be integrally formed with the alleged planar stop. Since Boynton does not teach the subject matter of amended claim 8, it is respectfully submitted that as amended, claim 8 patentably defines over Boynton and is therefore allowable.

As amended, claim 9 recites a shaft member connected to the head section and extending coaxially within the tubular portion, wherein the shaft member and the head section are longitudinally movable relative to the tubular portion. Boynton does not teach or suggest that the head section is longitudinally movable relative to the tubular portion.

Boynton appears to teach a piston rod 16 that is moved by fluid pressure coaxially within casing 2, causing the blade 22 to rotate about the pivot bolt 24 (lines 62-70 and Figs. 1-2). In order for the blade 22 to rotate about the pivot bolt 24, the pivot bolt 24 must be secured to the casing 2. This allows the blade 22 to rotate relative to the end of the casing 2 (*see* Figs. 1-2). Since the pivot bolt 24 is

secured to the casing 2, and the blade 22 is secured to the pivot bolt 24, the blade 22 cannot move longitudinally relative to the casing 2 because the pivot bolt 24 cannot move longitudinally relative to the casing 2. Since Boynton does not teach the subject matter of amended claim 9, it is respectfully submitted that as amended, claim 9 patentably defines over Boynton and is therefore allowable.

Claim 10 recites that the shaft member includes a terminal portion that projects beyond the proximal end portion of the elongate member. Boynton does not teach such structure. Boynton appears to teach a piston rod 16 disposed within the casing 2 (Fig. 1). When the blade 22 is in a vertical position, the end of the piston rod 16 disposed in collar 25 does not extend beyond the end of the casing 2 (Fig. 1). Likewise, when the blade 22 is in a horizontal position, the end of the piston rod 16 coupled to piston rod 14 does not extend beyond the shoulder 3a of the casing 2 (Fig. 2). Since Boynton does not teach the subject matter of claim 10, it is respectfully submitted that claim 10 patentably defines over Boynton and is therefore allowable.

Claim 11 depends from claim 1 and is allowable for the same reasons claim 1 is allowable, and for the specific limitations recited therein.

As amended, claim 20 recites, *inter alia*, an articulatable head section having at least one planar stop surface and a cutting edge projecting from, and integrally formed with, the at least one planar stop surface. Boynton does not teach or suggest an articulatable head section having at least one planar stop surface. Even if Boynton teaches a planar stop surface, as the Examiner asserts, it is not part of the head section. The planar stop the Examiner refers to on page 4 of the Office Action is part of the end section 3 comprising part of the casing 2 – it is not part of

the blade 22. The fact that the blade 22 rotates relative to the alleged planar stop surface reaffirms this (see Figs. 1-2).

Furthermore, Boynton does not teach or suggest a cutting edge integrally formed with the at least one planar stop surface. Boynton appears to teach that the rotary reamer blade 22 is pivotally mounted to the casing 2 comprising threaded sections 3 (Fig. 1). As noted, the alleged planar stop is part of the casing 2. Therefore, since the blade 22 is pivotally mounted to the casing 2, and the alleged planar stop is formed as part of the casing, the cutting edge of the blade 22 cannot possibly be integrally formed with the alleged planar stop.

As amended, claim 20 further recites that the distal end portion of the elongate member further includes a ratchet wheel. Boynton does not teach such structure. Boynton appears to teach that a rack 20 is connected to, or integrally formed on, the lowermost piston 14 connected to the piston rod 16 (lines 83-87 and 94-96; Fig. 1). Rack 20 is linear in nature and slides parallel to, and along, the inside surface of the section 3 nearest the discharge port 41 (Figs. 1-2 and 4). That is, rack 20 is linear, and not wheel-shaped, as recited in amended claim 20. Since Boynton does not teach the subject matter of amended claim 20, it is respectfully submitted that as amended, claim 20 patentably defines over Boynton and is therefore allowable.

As amended, claim 22 recites, *inter alia*, an articulatable head section having at least one planar stop surface and a cutting edge projecting from, and integrally formed with, the at least one planar stop surface. Boynton does not teach or suggest an articulatable head section having at least one planar stop surface. Even if Boynton teaches a planar stop surface, as the Examiner asserts, it is not part of

the head section. The planar stop the Examiner refers to on page 4 of the Office Action is part of the end section 3 comprising part of the casing 2 – it is not part of the blade 22. The fact that the blade 22 rotates relative to the alleged planar stop surface reaffirms this (see Figs. 1-2).

Furthermore, Boynton does not teach or suggest a cutting edge integrally formed with the at least one planar stop surface. Boynton appears to teach that the rotary reamer blade 22 is pivotally mounted to the casing 2 comprising threaded sections 3 (Fig. 1). As noted, the alleged planar stop is part of the casing 2. Therefore, since the blade 22 is pivotally mounted to the casing 2, and the alleged planar stop is formed as part of the casing, the cutting edge of the blade 22 cannot possibly be integrally formed with the alleged planar stop. Since Boynton does not teach the subject matter of amended claim 22, it is respectfully submitted that as amended, claim 22 patentably defines over Boynton and is therefore allowable.

As amended, claim 23 recites, *inter alia*, an articulatable head section having a cutting edge for cutting cortical bone and at least one planar stop surface, the cutting edge projecting from, and integrally formed with, the at least one planar surface. Boynton does not teach or suggest an articulatable head section having at least one planar stop surface. If the articulatable head has a cutting edge, and the at least one planar stop surface is integrally formed with the cutting edge, then the head has at least one planar stop surface.

Even if Boynton teaches a planar stop surface, as the Examiner asserts, it is not part of the head section. The planar stop the Examiner refers to on page 4 of the Office Action is part of the end section 3 comprising part of the casing 2 – it is

not part of the blade 22. The fact that the blade 22 rotates relative to the alleged planar stop surface reaffirms this (see Figs. 1-2).

Furthermore, Boynton does not teach or suggest a cutting edge integrally formed with the at least one planar stop surface. Boynton appears to teach that the rotary reamer blade 22 is pivotally mounted to the casing 2 comprising threaded sections 3 (Fig. 1). As noted, the alleged planar stop is part of the casing 2. Therefore, since the blade 22 is pivotally mounted to the casing 2, and the alleged planar stop is formed as part of the casing, the cutting edge of the blade 22 cannot possibly be integrally formed with the alleged planar stop.

As amended, claim 23 further recites that the distal end portion of the elongate member further includes a ratchet wheel. Boynton does not teach such structure. Boynton appears to teach that a rack 20 is connected to, or integrally formed on, the lowermost piston 14 connected to the piston rod 16 (lines 83-87 and 94-96; Fig. 1). Rack 20 is linear in nature and slides parallel to, and along, the inside surface of the section 3 nearest the discharge port 41 (Figs. 1-2 and 4). That is, rack 20 is linear, and not wheel-shaped, as recited in amended claim 20. Since Boynton does not teach the subject matter of amended claim 23, it is respectfully submitted that as amended, claim 23 patentably defines over Boynton and is therefore allowable.

The present amendment does not raise any new issues and does not require any further searching on the part of the Examiner. The issues raised in the present amendment were not previously raised because the Applicant felt the applicant was in condition for allowance. The present amendment places the application in condition for allowance and is believed to be clearly appropriate.

In view of the foregoing, it is respectfully requested that the above-identified amendment be entered and the application allowed. Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,

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